

REMARKS/ARGUMENTS

Reconsideration of the above-identified application, in view of the following remarks, is respectfully requested.

I Status Of The Claims

The Examiner has indicated that claims 26-28 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claim. Accordingly, claim 28 has been rewritten in independent form. Claims 26 and 27 have been canceled, and rewritten as new claims 32 and 33, respectively, which depend from claim 28. New claims 32 and 33 are identical to claims 26 and 27, save changes in claim dependency.

New claims 34-36, dependent on claim 28 have been added. Support for the new claims may be found in the specification at page 15, line 30 to page 16, line 18, and in original claims 28-30. No new matter has been added by these amendments.

Claims 14, 15, 19, 24, and 25 have been withdrawn by the Examiner. Claims 1-13, 16-18, 20-23, and 26-36 are currently at issue.

II Rejections under 35 U.S.C. § 112

(i) Claims 1-13, 16-18, 20-23, and 29-31 stand rejected under 35 U.S.C. § 112, first paragraph, for lack of written description. At pages 3-5 of the Office Action, the Examiner quotes from *Regents of the Univ. of Cal. v. Eli Lilly & Co.*, 119 F.3d 1159 (Fed. Cir. 1997) and *Univ. of Rochester v. G. D. Searle & Co., Inc.*, 249 F.2d 216 (W.D.N.Y. 2003). The Examiner asserts that although the specification recites methods for inhibiting PTPases and an assay for determining whether specified candidate inhibitors are suitable, the rejected claims are not limited to specific inhibitor species, but instead recite species characterized incompletely by functionality (such as “interactions” with various enzyme sites) and nominal partial structure (various heterocyclic moieties). The Examiner concludes that the specification represents “no more than a “plan” or

One of ordinary skill in the art, with reference to pages 50-62 and 77-79 of the specification, would readily appreciate the structural parameters required by PTB1B inhibitors that may be used in the method of the present invention.

As set forth above, the present specification clearly provides adequate teachings of compounds which inhibit PTPase and are useful in the claimed methods. Accordingly, applicants respectfully request that the rejection be withdrawn.

(ii) Claims 1-13, 16-18, 20-23, and 29-31 stand rejected under 35 U.S.C. § 112, first paragraph, for lack of enablement. The Examiner acknowledges that the claims are enabled for the inhibition of PTPases by inhibitors falling within the generic structural formula recited in claim 28, but asserts that the specification “does not reasonably provide enablement for the use of inhibitors as broadly recited by purely functional characteristics.”

At pages 2-6 of the Office Action, the Examiner sets forth the *In re Wands* factors, and concludes that the specification would not enable one skilled in the art to practice the invention without undue experimentation. The Examiner states, at page 7 of the Office Action, that the working examples of the specification (as set forth at pages 299-307) “run activity assays on a few select inhibitors, all within the scope of the generic formula set forth in claim 28.” The Examiner concludes that the present specification “fails to provide guidance and information sufficient to allow the skilled artisan to ascertain which inhibitors, known of to be discovered, can be used to inhibit PTPases, without resorting to undue experimentation.” The Examiner also asserts that “the skilled artisan would expect the interactions of a particular inhibitor and enzyme to be very specific and highly unpredictable, with no *a priori* expectation of success for using specific inhibitors beyond the scope of the generic formula set forth in claim 28.”

This rejection is respectfully traversed. Contrary to the Examiner’s assertion, the specification provides adequate teachings for one skilled in the art to practice the claimed invention.

The present claims are directed to a method of inhibiting intracellular or membrane-associated PTPases having an aspartic acid (Asp) in position 48 using the numbering for PTP1B, by

may be broader than the specific embodiment disclosed in a specification” (650 F.2d 1212, 1215, 211 USPQ 323, 326 [Cust. & Pat.App., 1981]). Finally, in *In re Goffe* (542 F.2d 564, 567, 191 USPQ 429, 431 [CCPA 1976]), the court stated:

To provide effective incentives, claims must adequately protect inventors. To demand that the first to disclose shall limit his claims to what he has found will work or to materials which meet the guidelines specified for "preferred" materials in a process such as the one herein involved would not serve the constitutional purpose of promoting progress in the useful arts.

One of ordinary skill in the art would readily recognize those conditions, such as autoimmune diseases, acute and chronic inflammation, osteoporosis, cancers, type I diabetes, type II diabetes, and obesity, in which the substrates identified in the specification are involved. Indeed, the present specification discloses numerous references that teach various conditions that are associated with PTPases (see “Summary Of Background Section” on pages 15-16 of the present specification).

Applicants need not provide working examples for all embodiments of the invention. The Examiner, moreover, has mis-characterized the level of guidance present in the instant specification, overstated the amount of experimentation required to determine specific PTPase inhibitors and underestimated the level of skill in the art.

Accordingly, in view of the arguments set forth above, applicants believe that the pending claims in this application are fully enabled by the specification, and respectfully request that this rejection be withdrawn.

In view of the foregoing remarks, each of the presently pending claims in this application is believed to be in condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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Respectfully submitted,

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